

**AMENDMENTS TO THE CLAIMS**

*Please amend the claims as follows:*

1. (Currently Amended) A method for generating and displaying a channel map for a network, the method comprising the steps of:  
retrieving channel data for a plurality of nodes in the network;  
generating a graphical image of the channel map representing a first node and a second node of the plurality of nodes in the network from the retrieved channel data, the graphical image showing a relationship of a channel in the first node to a channel in the second node; and  
displaying the graphical image of the channel map,  
wherein the channel data include information regarding bands and channels utilized in the network, wherein the network utilizes a plurality of bands and each band has a plurality of channels.
2. (Original) The method of claim 1, further comprising the steps of determining nodes in the network; and wherein the step of retrieving channel map data is performed for each node determined to be in the network.
3. (Original) The method of claim 1, further comprising the steps of receiving an input requesting information about a channel;  
generating a second image of requested information; and

displaying the second image with the generated image.

4. (Original) The method of claim 3, wherein the step of generating comprises creation of a list of channel data; and the step of displaying includes creating a window over the graphical image of the channel map and showing the list in the window.

5. (Currently amended) The method of claim 4, wherein the list of channel data also includes ~~band, channel,~~ at least one of a side, circuit pack type, role and access type.

6. (Original) The method of claim 3, wherein the step of generating includes producing a popup menu of supported operations including one from the group of get additional information, generate reports or transition to other channel map images.

7. (Original) The method of claim 1, further comprising the step of storing retrieved channel data for the plurality of nodes in storage at the element management system.

8. (Original) The method of claim 1, further comprising the steps of  
receiving an input requesting a report;  
generating an image of the channel map in HTML format; and  
opening a browser window and displaying the generated image in the  
window.
9. (Original) The method of claim 1, further comprising the steps of  
receiving an input requesting a report;  
generating an image of the channel map in a printer file; and  
sending the printer file to a printer.
10. (Original) The method of claim 1, further comprising the steps of:  
receiving an input requesting an export of a channel map;  
creating a file with the channel map data; and  
storing the created file.
11. (Original) The method of claim 1, wherein the step of retrieving  
channel data includes the steps of:  
retrieving optical band channel assignments;  
retrieving sub-rate information;  
retrieving data on provisioned circuits; and

retrieving data on sub rate circuits.

12. (Original) The method of claim 1, further comprising the step of updating the channel map data and displaying an updated version of the channel map.

13. (Original) The method of claim 12, wherein the step of updating the channel map data and displaying an updated version of the channel map is responsive to one from the group of: user input, passage of time or an event being sent from an administrative complex of a node to the element management system.

14. (Currently Amended) The method of claim 1, wherein the graphical image of the channel map is a window having a first, second and third columns, the first column provides labels for the bands and channels on a first direction to/from the first node, the third column provides labels for the bands and channels on a second direction to/from the second node, and the second column is positioned between the first and third columns and depicts channel and band allocation information.

15. (Original) The method of claim 14, wherein the second column has a plurality of cells with left and right portions for displaying west and east side information for the node and lines in the cells correspond to connections made by the node, and wherein rows in the first and third columns are labeled with a unique channel identifier that includes a row and channel designation.

16. (Original) The method of claim 15, wherein the rows are grouped in bands and each band is marked by visually distinct delineation.

17. (Original) The method of claim 15, wherein the graphical image of the channel map further comprises a legend positioned proximate the first, second and third columns in a split pane, the legend displays icons that may be placed in the cells of the second column and associated text descriptions.

18. (Original) The method of claim 15, wherein the graphical image of the channel map further comprises a legend positioned proximate the first, second and third columns in a split pane, the legend displays icons that may be placed in the cells of the second column and associated text descriptions.

19. (Original) The method of claim 15, wherein the icons in the legend include one from the group of:

icons indicating whether the node is performing an add/drop function and whether a multiplexer exists;

icons indicating administrative state;

icons representing alarm states;

icons representing regeneration or pass through by a node; and

icons representing error conditions.

20. (Original) The method of claim 15, wherein lines in the cells are used to represent circuits, and line with a first visual format represents a non-provisioned circuit, and a line with a second visual format represents a provisioned circuit.

21. (Currently Amended) The method of claim 20, wherein a color of a ~~lines~~ line used to indicate the status of the circuit, and wherein the line is colored a first color to indicate a critical problem, a second color to indicate a major problem, a third color to indicate a minor problem, and a fourth color to indicate no alarm conditions.

22. (Original) The method of claim 1, wherein the graphical image of the channel map is a window having a first column, a second column, and a plurality of additional columns, the first column providing labels for the bands and channels on a first direction to/from a node, the second column provides labels for the bands and channels on a second direction to/from a second node, and the plurality of additional columns is positioned between the first and second columns and depicts channel and band allocation information.

23. (Original) The method of claim 22, wherein each of the additional columns has a plurality of cells with left and right portions for displaying west and east side information for the node and lines in the cells correspond to connections made by the node, and wherein rows in the first and second columns are labeled with a unique channel identifier that includes a row and channel designation.

24-32 Canceled.

33. (New) The method of claim 1, wherein at least one channel of the plurality of channels is an optical signaling channel carrying administrative information.

34. (*New*) The method of claim 33, wherein the optical signaling channel is carried on a wavelength channel out-of-band from payload wavelength channels.

35. (*New*) The method of claim 33, wherein the optical signaling channel occupies one or more divisions of a time-division multiplexed signal.

36. (*New*) The method of claim 33, wherein the optical signaling channel is modulated onto payload signals.